

CLAIMS

5 1. An editing system having an editing device for editing a base band signal and an editing controlling device connected to the editing device, wherein the editing controlling device comprises:

10 first decoding means for decoding a first encoded bit stream of which a material has been encoded and outputting a first base band signal;

15 second decoding means for decoding a second encoded bit stream of which a material has been encoded and outputting a second base band signal to the editing device;

20 encoding means for re-encoding a third base band signal as an edited result of the first base band signal and the second base band signal received from the editing device with codec information used in said first decoding means and said second decoding means and outputting a third encoded bit stream; and

25 controlling means for selecting codec information used by said first encoding means and said second encoding means corresponding to edit position information received from an external device.

2. The editing system as set forth in claim 1, further comprising:

selecting means for selecting the third encoded bit stream in a predetermined region including

an edit position at which the first base band signal and the second base band signal are connected and for selecting one of the first encoded bit stream and the second encoded bit stream in other than the predetermined region.

3. The editing system as set forth in claim 1, further comprising:

means for correlating the first and second encoded bit streams with the first and second base band signals.

4. The editing system as set forth in claim 1, wherein the first encoded bit stream and the second bit stream are input from a material storing device, and

wherein the third encoded bit stream is output to the material storing device.

5. The editing system as set forth in claim 1, wherein the first encoded bit stream is a broadcast signal received from another station through a transmission medium, and

wherein the second encoded bit stream is a broadcast material inserted into the broadcast signal.

6. The editing system as set forth in claim 5, wherein the broadcast material is a CM (Commercial Message) material.

7. The editing system as set forth in claim 5, wherein the broadcast material is a station

logo.

8. An editing controlling apparatus, comprising
first decoding means for decoding a first
encoded bit stream of which a material has been encoded
and outputting a first base band signal;

second decoding means for decoding a second
encoded bit stream of which a material has been encoded
and outputting a second base band signal to an editing
device;

encoding means for re-encoding a third base
band signal as an edited result of the first base band
signal and the second base band signal received from
the editing device with codec information used in said
first decoding means and said second decoding means and
outputting a third encoded bit stream; and

controlling means for selecting codec
information used by said first encoding means and said
second encoding means corresponding to edit position
information received from an external device.

9. The editing controlling apparatus as set
forth in claim 8, further comprising:

selecting means for selecting the third
encoded bit stream in a predetermined region including
an edit position at which the first base band signal
and the second base band signal are connected and for
selecting one of the first encoded bit stream and the
second encoded bit stream in other than the

predetermined region.

10. The editing controlling apparatus as set forth in claim 8, further comprising:

means for correlating the first and second encoded bit streams with the first and second base band signals.

11. The editing controlling apparatus as set forth in claim 8,

wherein the first encoded bit stream and the second bit stream are input from a material storing device, and

wherein the third encoded bit stream is output to the material storing device.

12. The editing controlling apparatus as set forth in claim 8,

wherein the first encoded bit stream is a broadcast signal received from another station through a transmission medium, and

wherein the second encoded bit stream is a broadcast material inserted into the broadcast signal.

13. The editing controlling apparatus as set forth in claim 12,

wherein the broadcast material is a CM (Commercial Message) material.

14. The editing controlling apparatus as set forth in claim 12,

wherein the broadcast material is a station

logo.

15. An editing controlling method, comprising the steps of:

inputting a first encoded bit stream of which
5 a first material has been encoded and a second encoded
bit stream of which a second material has been encoded;

10 sending to an editing device a first base
band signal and a second base band signal of which the
first encoded bit stream and the second encoded bit
stream have been decoded respectively;

receiving a third base band signal as an
edited result of the first base band signal and the
second base band signal from the editing device;

15 selecting required codec information of codec
information used for decoding the first encoded bit
stream and the second encoded bit stream corresponding
to edit position information received from an external
device; and

20 re-encoding the third base band signal with
the selected coded information and outputting a third
encoded bit stream.

25 16. An editing controlling apparatus having an
editing device for editing a base band signal and an
editing controlling device connected to the editing
device,

wherein the editing controlling device
comprises:

first decoding means for decoding a first encoded bit stream of which a material has been encoded and outputting a first base band signal;

5 second decoding means for decoding a second encoded bit stream of which a material has been encoded and outputting a second base band signal to the editing device;

10 comparing means for comparing the first base band signal, the second base band signal, and the third base band signal in the state that the phases thereof match so as to detect an edit position;

controlling means for selecting codec information used in a re-encoding process corresponding to information of the edit position; and

15 encoding means for re-encoding the third base signal as an edited result of the first base band signal and the second base band signal received from the editing device using the selected codec information and outputting a third encoded bit stream.

20 17. The editing system as set forth in claim 16, further comprising:

25 selecting means for selecting the third encoded bit stream in a predetermined region including an edit position at which the first base band signal and the second base band signal are connected and for selecting one of the first encoded bit stream and the second encoded bit stream in other than the

predetermined region.

18. The editing system as set forth in claim 16, further comprising:

means for correlating the first base band signal, the second base band signal, and the third base band signal on time base;

means for storing the first base band signal and the second base band signal in such a manner that the first base band signal and the second base band signal correlate on the time base corresponding to an arrangement tag; and

means for storing codec information obtained in the decoding process of the first encoded bit stream and the second encoded bit stream in such a manner that the codec information correlates with the arrangement tag on the time base.

19. An editing controlling apparatus, comprising:
first decoding means for decoding a first encoded bit stream of which a material has been encoded and outputting a first base band signal;

second decoding means for decoding a second encoded bit stream of which a material has been encoded and outputting a second base band signal to an editing device;

comparing means for comparing the first base band signal, the second base band signal, and the third base band signal in the state that the phases thereof

match so as to detect an edit position;

controlling means for selecting codec information used in a re-encoding process corresponding to information of the edit position; and

5 encoding means for re-encoding the third base signal as an edited result of the first base band signal and the second base band signal received from the editing device using the selected codec information and outputting a third encoded bit stream.

10 20. The editing controlling apparatus as set forth in claim 19, further comprising:

selecting means for selecting the third encoded bit stream in a predetermined region including an edit position at which the first base band signal and the second base band signal are connected and for selecting one of the first encoded bit stream and the second encoded bit stream in other than the predetermined region.

15 21. The editing controlling apparatus as set forth in claim 19, further comprising:

means for correlating the first base band signal, the second base band signal, and the third base band signal on time base;

25 means for storing the first base band signal and the second base band signal in such a manner that the first base band signal and the second base band signal correlate on the time base corresponding to an

arrangement tag; and

means for storing codec information obtained in the decoding process of the first encoded bit stream and the second encoded bit stream in such a manner that the codec information correlates with the arrangement tag on the time base.

22. An editing controlling method, comprising the steps of:

inputting a first encoded bit stream of which a first material has been encoded and a second encoded bit stream of which a second material has been encoded;

sending to an editing device a first base band signal and a second base band signal of which the first encoded bit stream and the second encoded bit stream have been decoded respectively;

storing the first base band signal, the second base band signal, and codec information used in the decoding process of the first base band signal and the second base band signal;

receiving a third base band signal as an edited result of the first base band signal and the second base band signal from the editing device;

comparing the first base band signal with the third base band signal in the state that the phases of the first base band signal and the third base band signal match and comparing the second base band signal with the third base band signal in the state that the

phases of the second base band signal and the third base band signal match so as to detect an edit position;

selecting codec information used in the re-encoding process of the third base band signal corresponding to the detected edit position; and

re-encoding the third base band signal with the selected coded information and outputting a third encoded bit stream.

23. The editing controlling method as set forth in claim 22, further comprising the steps of:

correlating the first base band signal, the second base band signal, and the third base band signal on time base; and

storing codec information obtained in the decoding process of the first encoded bit stream and the second encoded bit stream in such a manner that the codec information correlates with an arrangement tag on the time base.

24. The editing controlling method as set forth in claim 22,

wherein when an edit position is detected, the comparison is performed for each picture, an edit position for each picture being detected, codec information being selected for each picture corresponding to each detected edit position.

25. The editing controlling method as set forth

in claim 22,

wherein in the case that a picture that has been encoded in inter-frame predictive encoding process is re-encoded, when a relevant picture corresponding to a predictive picture in the third base band signal is present in the first base band signal or the second base band signal, the codec information is re-used.

26. The editing controlling method as set forth in claim 25,

wherein in the case that a picture that has been encoded in inter-frame predictive encoding process is re-encoded, when a relevant picture corresponding to a predictive picture in the third base band signal is present in the first base band signal or the second base band signal, the codec information is re-used,

wherein when the relevant picture is not present in the first base band signal or the second base band signal, it is determined whether or not a block corresponding to a predictive block smaller than the picture is present in the first base band signal or the second base band signal, and

wherein when the relevant block is present in the first base band signal or the second base band signal, codec information for each block is re-used.

27. The editing controlling method as set forth in claim 26,

wherein when an inter-frame predictive

encoding process and a motion compensating process have been performed, it is determined whether or not a block corresponding to the predictive block is present at a position moved by a moving vector.

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